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Bureau of Industry and Security
U.S. Department of Commerce
1401 Constitution Avenue, NW
Room 1093
Washington, DC 20230

Submitted via e-mail

RE: Notice of Request for Public Comments and Public Hearing on Section 232 National Security Investigation of Imports of Steel

The Forging Industry Association (FIA) appreciates the opportunity to provide comments regarding the effects on national security of imports of steel from the perspective of the U.S. forging industry, a steel-consuming industry that supplies critical parts to the defense industry and is a basic building block for virtually all manufacturing. As a large customer of the U.S. steel industry, the forging industry is extremely dependent on that industry being a healthy one. FIA understands the concerns regarding overcapacity in the global steel industry, particularly in China, and supports efforts to reduce that overcapacity through negotiations with China. However, we are concerned that attempting to address overcapacity through this 232 investigation will not properly account for the downstream impacts of broad trade remedies that could result from this investigation.

The following comments provide background on the forging industry and our importance to national security, as well as further detail regarding our concerns with the potential downstream impacts from any possible results of the 232 investigation on steel. In short, the forging industry believes the investigation must take into consideration any adverse effects from any potential trade actions on downstream steel products such as steel forgings, because forgings and the forging industry are essential to national security. Any potential government action under section 232 with respect to steel could, unless carefully crafted, significantly harm the US steel forging industry and national security.

Background on the Forging Industry

Forging is one of the oldest known metalworking processes where metal is pressed, pounded or squeezed under great pressure into high strength parts known as forgings. The process is normally (but not always) performed hot by preheating the metal to a desired temperature before it is worked. It is important to note that the forging process is entirely different from the casting (or foundry) process, as metal used to make forged parts is never melted and poured (as in the casting process). A wide range of materials and alloys can be forged... from A (Aluminum) to Z (Zirconium).

Forged parts are strong and reliable and therefore vital in safety-critical applications. Rarely seen by consumers, forgings are normally component parts inside assemblies. If it moves on land, in the air, or on the sea, it contains forgings. *That means that forgings are found in almost every defense/military application available and all throughout the economy.* Following is a list of all the sectors of the economy in which you'll find forgings, including national security/defense.

- **Aerospace** – High strength-to-weight ratio and structural reliability improve performance, range, and payload capabilities of aircraft. That's why ferrous and nonferrous forgings are used in helicopters, piston-engine planes, commercial jets, and supersonic military aircraft. Many aircraft are "designed around" forgings, and contain more than 450 structural forgings as well as hundreds of forged engine parts. Forged parts include bulkheads, wing roots and spars, hinges, engine mounts, brackets, beams, shafts, bellcranks, landing-gear cylinders and struts, wheels, brake carriers and discs, and arresting hooks. In jet turbine engines, iron-based, nickel-based, and cobalt-based superalloys are forged into buckets, blades, couplings, discs, manifolds, rings, chambers, wheels, and shafts.
- **Automotive** – In automotive and truck applications, forged components are commonly found at points of shock and stress. Cars and trucks may contain more than 250 forgings, most of which are produced from carbon or alloy steel. Forged engine and powertrain components include connecting rods, crankshafts, transmission shafts and gears, differential gears, drive shafts, clutch hubs, and universal joint yokes and crosses. Forged camshafts, pinions, gears, and rocker arms offer ease of selective hardening as well as strength. Wheel spindles, kingpins, axle beams and shafts, torsion bars, ball studs, idler arms, pitman arms, steering arms, and linkages for passenger cars, buses, and trucks typify applications requiring extra strength and toughness.
- **Defense** – A heavy tank contains over 550 separate forgings; the 120mm gun tube on the M1A2 battle tank is forged; the US Navy's Aegis Class guided missile destroyers are steered by 2 forged rudder stocks approximately 20 feet in length and weighing 35,000 pounds each; cruise missile warheads and all penetrator bomb cases are forged; and a standard artillery shell usually contains at least 2 forged components.
- **Oil and Gas Exploration** – Hundreds of forgings such as valves and fittings are used in both an oil rig tension leg platform and a land-based drilling rig. Forgings are also used in the transportation of oil and gas under high pressure.
- **Power Generation** – Pressure vessels; generator rotors; pump shafts; valve manifolds; valve bodies; turbine blades and rotors; pipes; and fittings are forged for nuclear (commercial and naval), land (including geothermal and biomass), and marine power generation equipment.
- **Wind Energy** – Approximately 20 metric tons of forgings are used in a typical large wind turbine.
- **Mining** – Forgings up to 70,000 pounds are used in surface and underground mining equipment.
- **Rail** – The Association of American Railroads requires all locomotive axles to be forged for railcars and locomotives. In locomotives, the traction gears and the engine crankshaft and camshaft are also all forged.
- **Medical** – Quality surgical tools and joint replacements require strong, lightweight forgings.
- **Tools** – Hammers and wrenches are forged.
- **Sports** – Forged golf clubs allow more efficient transfer of energy from club to ball than traditional clubs – that equals more distance without swinging harder.

In 2016, custom forgings accounted for nearly \$10.5 billion of sales in North America. An additional \$3-5 billion in catalog and captive sales would bring the industry total for 2016 to the \$13.5 – 15.5 billion range. The North American forging industry is comprised of nearly 500 forging operations in 38 states, Canada and Mexico, with the largest US presence of forging operations located in Ohio (79), Pennsylvania (63), Illinois (54), Michigan (54), California (38), Texas (41), New York (16), Indiana (18), Wisconsin (17), Kentucky (13), Massachusetts (10), and South Carolina (9).

The modern forging process is capital intensive, requiring an abundance of heavy equipment for manufacture and the people to run and maintain it. Most forging plants are small businesses. 55% of FIA members have sales below \$30 million. Only 12% have sales over \$120 million. These operations provide more than 36,000 well-paid jobs and benefits. Based on compensation and benefit surveys administered by FIA, full-time employment equivalent management and hourly forge shop employees, on average, receive compensation and benefits paid by the employer of more than \$93,000 per year.

FIA Concerns with the 232 Investigation on Steel

The underlying purpose of any remedy imposed pursuant to this investigation is to ensure that the U.S. continues to have a strong domestic steel industry. However, if the remedy does harm to the domestic steel industry's customer base, such as steel forgers, those impacts could mitigate or even negate any positive impacts that may result.

As noted above, the steel forging industry supplies many products essential to national security, including numerous tank and automotive forgings for combat vehicles, small caliber weapons forgings, ordnance forgings, and forgings used in building airplanes, helicopters, ships and submarines. In fact, U.S. statutes affecting export controls and specialty metal purchasing requirements for the Department of Defense all contain language specifying forgings be made domestically. In addition to their direct military applications, steel forgings are also vital to national security because of their use across all segments of our industrial economy. Forgings form the backbone of planes, trains, trucks, construction equipment, agricultural equipment, energy production and infrastructure. If the domestic steel forging industry is adversely impacted by actions taken to support the steel industry, national security would be jeopardized because our military and industrial economy would have no alternative but to rely on other countries for our supply of steel forgings.

US steel forgers rely almost exclusively on domestically-produced SBQ steel. SBQ is specialty steel long products made to customer specifications suited for forging into the final product. Because it is heavy, bulky and expensive to ship long distances, the forging industry depends upon a healthy, competitive domestic SBQ steel industry to provide necessary raw material at globally competitive prices for steel forging here in the U.S. The "globally competitive prices" are critically important – if the price for domestic SBQ steel is higher in the U.S. than anywhere else in the world due to tariffs or trade restrictions, then we begin to see less imports of raw material and more imports of downstream products.

The US steel forging industry relies heavily on 6 domestic SBQ steel producers with mills in multiple locations. SBQ steel imports accounted for 15% of the consumption in 2016, and domestic consumption was 4 million tons of SBQ steel, while SBQ imports totaled only 600,000 tons. This import volume has remained relatively flat over the past few years. By comparison, US imports of all steel products (long, flat, pipe and tube, semi-finished and stainless) amounted to 26.4 million tons. Generally speaking, we do not believe the SBQ steel industry has been adversely affected by steel imports. The domestic SBQ steel market is currently running close to capacity, and producers recently announced substantial price increases.

While SBQ raw material import penetration has been relatively insignificant, the import of steel forgings has grown significantly and at an ever increasing rate, threatening the health and viability of the domestic steel forging industry. Unfortunately, other than evidence observed by U.S. forgers in the marketplace, there is little to no data to prove this threat to the forging industry because we lack the necessary import data. With the exception of a few product categories, many types of forgings imported into the U.S. do not have HTS codes and are therefore difficult, if not impossible, to track. Import data on forging products is limited to a few specific types of forgings, such as flanges and crankshafts. A recent example of the threat to just one product category can be found in the ongoing Department of Commerce Anti-Dumping/Countervailing Duties (AD/CVD) case on finished carbon steel flanges from India, Italy and Spain. Imports of that product from India, Italy and Spain were valued in 2015 at about \$90.6 million, \$31 million and \$26.8 million, respectively.

While the domestic steel industry is able to seek relief from dumped imports through the AD/CVD process, this often leads to a more finished good, such as a forging, being imported duty free and competing directly with a different U.S. manufacturer. This means that the same amount or more steel is coming into the U.S., but in the form of duty free components and finished goods, greatly exacerbating an already alarming trend. In effect, when current trade laws are used to remedy injury in one subsector of the economy, such as steel, they often shift the injury to another tier within the manufacturing sector.

Conclusion

In conclusion, FIA would like to emphasize that potential action under section 232 with respect to steel could, unless carefully crafted, result in increased costs for domestic steel forgers and render the domestic steel forging industry uncompetitive both locally and globally. Accordingly, FIA urges the Department to consider all potential impacts of any actions taken pursuant to this investigation, and to avoid any action that would harm the competitive position of the domestic steel forging industry and producers of downstream steel products like forgers that are essential to national security. Broad trade remedies such as the 232 that could affect all steel of all kinds may produce temporary relief for a small number of steel producers, but they are blunt instruments that may also have unintended negative consequences on steel consumers that make critical components in support of our national security and the rest of the economy. If any action is taken with respect to steel, FIA urges that the action be crafted to exempt the SBQ segment of the steel industry because the SBQ segment has not been adversely affected by steel imports, is currently running close to capacity, and has recently announced substantial price increases. We also agree with other commenters at the May 24, 2017 public hearing that Canada should be excluded from any 232 action. We also recommend that Mexico be excluded as our other NAFTA partner.

FIA appreciates the opportunity to submit comments about this critical issue. As we mentioned in our May 12 letter requesting a meeting with the Department on behalf of several steel consuming industry associations, we stand ready to meet with Secretary Ross and yourself to discuss these important issues. In the meantime, please contact Jennifer Reid, FIA's Washington Representative, at 202-393-8524 or jreid@thelaurinbakergroup.com if we can be of further assistance.

Sincerely,



Jeff Jones
2017-2018 Chairman of the Board
Forging Industry Association